

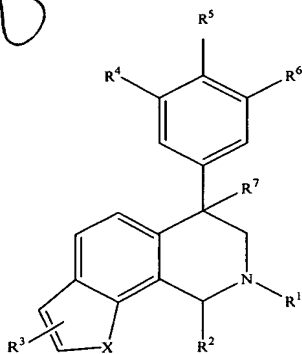
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

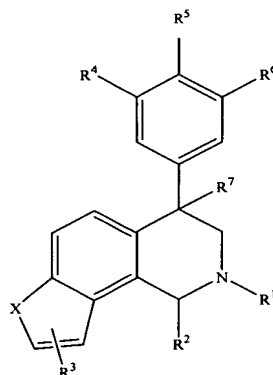
1. (currently amended) A compound of the Formula IA, IB, IIA, IIB,

IIIA or IIIB:

T.O900

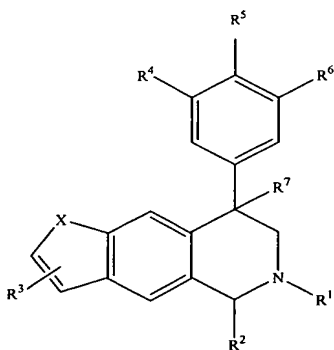


IA

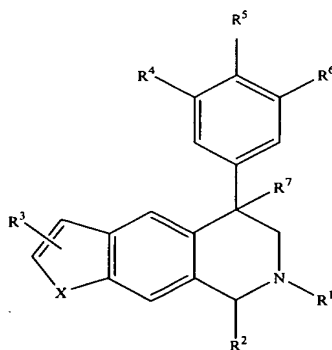


IB

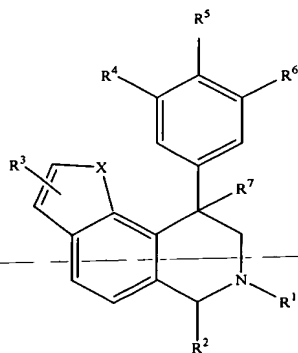
ai



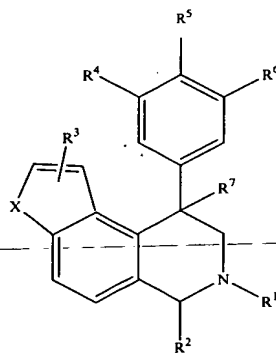
IIA



IIB



IIIA



IIIB

wherein:

R^1 is selected from the group consisting of C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, C_4 - C_7 cycloalkylalkyl and benzyl, each of which is optionally substituted with 1 to 3 substituents independently selected at each occurrence from C_1 - C_3 alkyl, halogen, -CN, -OR⁸ and -NR⁸R⁹;

R^2 is selected from the group consisting of H, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl, C_4 - C_7 cycloalkylalkyl and C_1 - C_6 haloalkyl;

R^3 is selected from the group consisting of H, halogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl and C_3 - C_6 cycloalkyl, wherein C_1 - C_6 alkyl, C_1 - C_6 haloalkyl and C_3 - C_6 cycloalkyl are optionally substituted with 1 to 3 substituents selected independently at each occurrence from OR⁸ and NR⁸R⁹;

R^4 , R^5 and R^6 are each independently selected at each occurrence thereof from the group consisting of H, halogen, -OR¹⁰, -NO₂, NR¹⁰R¹¹, -NR¹⁰C(O)R¹¹, ~~-NR¹⁰C(O)NR¹¹R¹²~~, -NR¹⁰C(O)NR¹¹R¹², -S(O)_nR¹¹, -CN, -C(O)R¹¹, -C(O)₂R¹¹, -C(O)NR¹¹R¹², C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl and C_4 - C_7 cycloalkylalkyl, wherein each of C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_6 cycloalkyl and C_4 - C_7 cycloalkylalkyl are optionally substituted with 1 to 3 substituents independently selected at each occurrence from C_1 - C_3 alkyl, halogen, =O, -CN, -OR⁸, -NR⁸R⁹ and phenyl, and wherein phenyl is optionally substituted with 1-3 substituents selected independently at each occurrence from halogen, -CN, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, -OR⁸ and -NR⁸R⁹; alternatively R^5 and R^6 are -O-C(R¹¹)₂-O-;

R^7 is selected from the group consisting of H, halogen and OR¹⁰;

R^8 and R^9 are each independently selected from the group consisting of H, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxyalkyl, C_1 - C_4 alkoxyalkylalkyl, C_3 - C_6 cycloalkyl, C_4 - C_7 cycloalkylalkyl, -C(O)R¹², phenyl and benzyl, wherein phenyl and benzyl are optionally substituted with 1 to 3 substituents selected independently at each occurrence from halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy and C_1 - C_4 haloalkoxy; ~~or R^8 and R^9 are taken together with the nitrogen to which they are attached to form a piperidine, pyrrolidine, piperazine, N-methylpiperazine, morpholine, or thiomorpholine ring;~~

R^{10} is selected from the group consisting of H, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxyalkyl, C_3 - C_6 cycloalkyl, C_4 - C_7 cycloalkylalkyl, -C(O)R¹², phenyl and benzyl, wherein phenyl and benzyl are optionally substituted with 1 to 3 substituents selected

A

independently at each occurrence from halogen, -NH₂, -OH, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy;

R¹¹ is selected from the group consisting of H, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxyalkyl, C₃-C₆ cycloalkyl, C₄-C₇ cycloalkylalkyl, phenyl and benzyl, where phenyl and benzyl are optionally substituted with 1 to 3 substituents selected independently at each occurrence from halogen, -NH₂, -OH, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy, ~~or R¹⁰ and R¹¹ are taken together with the nitrogen to which they are attached to form a piperidine, pyrrolidine, N-methylpiperazine, morpholine, or thiomorpholine ring, with the proviso that only one of R⁸ and R⁹ or R¹⁰ and R¹¹ are taken together with the nitrogen to which they are attached to form a piperidine, pyrrolidine, piperazine, N-methylpiperazine, morpholine, or thiomorpholine ring;~~

R¹² is selected from the group consisting of C₁-C₄ alkyl, C₁-C₄ haloalkyl and phenyl;

ai X is selected from the group consisting of \emptyset , O, NR¹³ and S, with the proviso that X is not NR¹³ when a compound is of Formula (IA);

n is 0, 1, or 2; and,

R¹³ is selected from the group consisting of H, C₁-C₆ alkyl, benzyl and phenyl, wherein C₁-C₆ alkyl, benzyl and phenyl are optionally substituted with 1-3 substituents selected independently at each occurrence from halogen, -NH₂, -OH, cyano, C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₁-C₄ alkoxy and C₁-C₄ haloalkoxy.

2. (original) The compound of claim 1, wherein R¹ is C₁-C₆ alkyl.
3. (original) The compound of claim 2, wherein R¹ is CH₃.
4. (original) The compound of claim 1, wherein R² is H, C₁-C₆ alkyl, C₃-C₆ cycloalkyl, or C₁-C₆ haloalkyl.
5. (original) The compound of claim 4, wherein R² is H or C₁-C₆ alkyl.
6. (original) The compound of claim 5, wherein R² is H.

7. (original) The compound of claim 1, wherein R^3 is at each occurrence thereof independently H, halogen, C_1 - C_6 alkyl, or C_1 - C_6 alkyl substituted with from 1 to 3 of OR^8 or NR^8R^9 .

8. (original) The compound of claim 7, wherein R^3 is H or C_1 - C_6 alkyl.

9. (original) The compound of claim 8, wherein R^3 is H.

10. (original) The compound of claim 1, wherein R^1 is CH_3 , R^2 is H and R^3 is H.

a 11. (original) The compound of claim 1, wherein R^4 , R^5 and R^6 are each independently H, halogen, C_1 - C_6 alkyl or $-OR^{10}$.

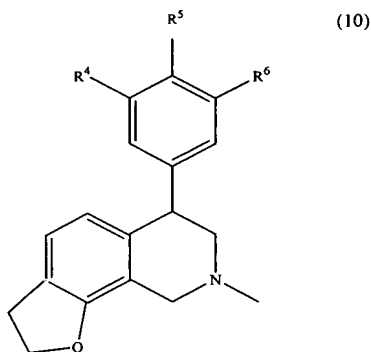
12. (original) The compound of claim 11, wherein at least one of R^4 , R^5 and R^6 is H.

13. (original) The compound of claim 12, wherein each of R^4 , R^5 and R^6 are H.

14. (original) The compound of claim 12, wherein one of R^4 , R^5 and R^6 is halogen.

15. (original) The compound of claim 1, wherein R^1 is CH_3 , R^2 and R^3 are each H, and at least one of R^4 , R^5 and R^6 is H.

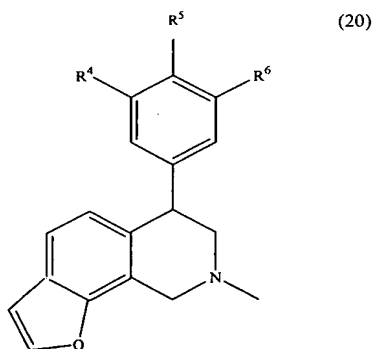
16. (currently amended) A compound of Formula (10) of claim 1:



or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (10) wherein R^4 is H, R^5 is H and R^6 is H;
- a compound of Formula (10) wherein R^4 is H, R^5 is Me and R^6 is H;
- a compound of Formula (10) wherein R^4 is Cl, R^5 is H and R^6 is H; and
- a compound of Formula (10) wherein R^4 is H, R^5 is F and R^6 is H.

17. (currently amended) A compound of Formula (20) of claim 1:

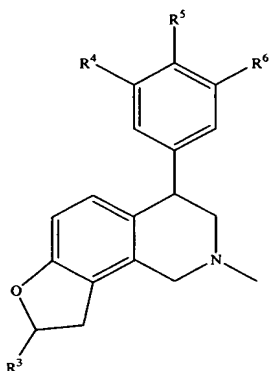


or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (20) wherein R^4 is H, R^5 is H and R^6 is H;
- a compound of Formula (20) wherein R^4 is H, R^5 is Me and R^6 is H;
- a compound of Formula (20) wherein R^4 is H, R^5 is Cl and R^6 is H;
- a compound of Formula (20) wherein R^4 is H, R^5 is F and R^6 is H; and
- a compound of Formula (20) wherein R^4 is F, R^5 is H and R^6 is F.

18. (currently amended) A compound of Formula (30) of claim 1:

(30)



or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

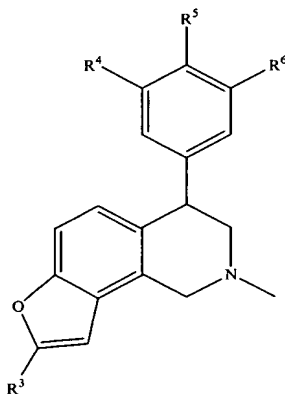
- a compound of Formula (30) wherein R³ is H, R⁴ is H, R⁵ is H and R⁶ is H;
a compound of Formula (30) wherein R³ is H, R⁴ is F, R⁵ is F and R⁶ is H;
a compound of Formula (30) wherein R³ is H, R⁴ is F, R⁵ is H and R⁶ is F;
a compound of Formula (30) wherein R³ is H, R⁴ is H, R⁵ is F and R⁶ is H;
a compound of Formula (30) wherein R³ is H, R⁴ is Cl, R⁵ is H and R⁶ is H;
a compound of Formula (30) wherein R³ is H, R⁴ is H, R⁵ is Cl and R⁶ is H;
a compound of Formula (30) wherein R³ is H, R⁴ is H, R⁵ is Cl and R⁶ is F;
a compound of Formula (30) wherein R³ is H, R⁴ is H, R⁵ is F and R⁶ is Cl;
a compound of Formula (30) wherein R³ is H, R⁴ is F, R⁵ is H and R⁶ is Cl;
a compound of Formula (30) wherein R³ is H, R⁴ is H, R⁵ is OMe and R⁶ is H;

and

- a compound of Formula (30) wherein R³ is H, R⁴ is F, R⁵ is H and R⁶ is H.

19. (currently amended) A compound of Formula (40) of claim 1:

(40)



or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (40) wherein R³ is H, R⁴ is H, R⁵ is H and R⁶ is H;
a compound of Formula (40) wherein R³ is H, R⁴ is F, R⁵ is F and R⁶ is H;
a compound of Formula (40) wherein R³ is H, R⁴ is F, R⁵ is H and R⁶ is F;
a compound of Formula (40) wherein R³ is H, R⁴ is F, R⁵ is H and R⁶ is H;
a compound of Formula (40) wherein R³ is H, R⁴ is H, R⁵ is F and R⁶ is H;
a compound of Formula (40) wherein R³ is H, R⁴ is Cl, R⁵ is H and R⁶ is H;
a compound of Formula (40) wherein R³ is H, R⁴ is H, R⁵ is Cl and R⁶ is H;
a compound of Formula (40) wherein R³ is H, R⁴ is H, R⁵ is Cl and R⁶ is F;
a compound of Formula (40) wherein R³ is H, R⁴ is H, R⁵ is F and R⁶ is Cl;
a compound of Formula (40) wherein R³ is H, R⁴ is F, R⁵ is H and R⁶ is Cl;
a compound of Formula (40) wherein R³ is H, R⁴ is H, R⁵ is OMe and R⁶ is H;
a compound of Formula (40) wherein R³ is Me, R⁴ is H, R⁵ is H and R⁶ is H;
a compound of Formula (40) wherein R³ is Et, R⁴ is H, R⁵ is H and R⁶ is H;

and

a compound of Formula (40) wherein R³ is CH₂OH, R⁴ is H, R⁵ is H and R⁶ is

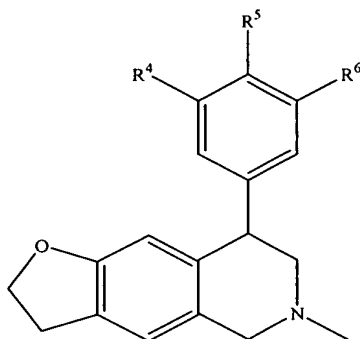
H.

Claims 20-22 (canceled)

20
23.

(currently amended) A compound of Formula (80) of claim 1:

(80)



or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

a compound of Formula (80) wherein R⁴ is H, R⁵ is H and R⁶ is H;

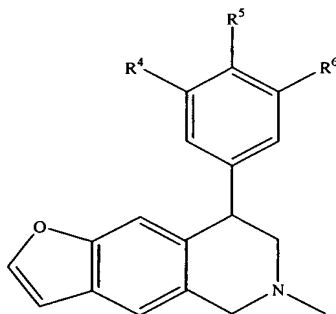
a compound of Formula (80) wherein R⁴ is H, R⁵ is F and R⁶ is H; and

a compound of Formula (80) wherein R⁴ is H, R⁵ is F and R⁶ is F.

21
24.

(currently amended) A compound of Formula (90) of claim 1:

(90)



or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

a compound of Formula (90) wherein R⁴ is H, R⁵ is H and R⁶ is H.

a compound of Formula (90) wherein R⁴ is H, R⁵ is F and R⁶ is F; and

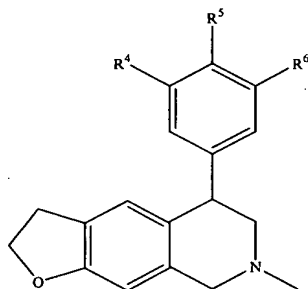
a compound of Formula (90) wherein R⁴ is H, R⁵ is F and R⁶ is H.

Claim 25 (canceled)

22
26.

(currently amended) A compound of Formula (110) of claim 1:

(110)



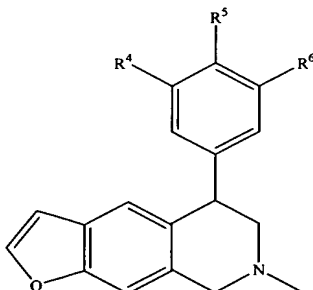
or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (110) wherein R⁴ is H, R⁵ is H and R⁶ is H;
- a compound of Formula (110) wherein R⁴ is H, R⁵ is F and R⁶ is F;
- a compound of Formula (110) wherein R⁴ is H, R⁵ is F and R⁶ is H;
- a compound of Formula (110) wherein R⁴ is H, R⁵ is H and R⁶ is Cl;
- a compound of Formula (110) wherein R⁴ is H, R⁵ is Cl and R⁶ is F;
- a compound of Formula (110) wherein R⁴ is H, R⁵ is F and R⁶ is Cl; and
- a compound of Formula (110) wherein R⁴ is H, R⁵ is OMe and R⁶ is H.

23
27.

(currently amended) A compound of Formula (120) of claim 1:

(120)



or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (120) wherein R⁴ is H, R⁵ is H and R⁶ is H;
- a compound of Formula (120) wherein R⁴ is H, R⁵ is F and R⁶ is F;
- a compound of Formula (120) wherein R⁴ is H, R⁵ is F and R⁶ is H;
- a compound of Formula (120) wherein R⁴ is H, R⁵ is H and R⁶ is Cl;

A

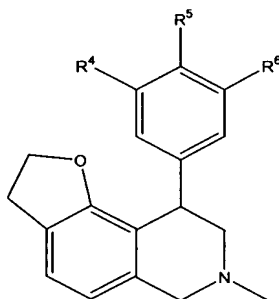
a compound of Formula (120) wherein R^4 is H, R^5 is Cl and R^6 is F;
a compound of Formula (120) wherein R^4 is H, R^5 is OMe and R^6 is H; and
a compound of Formula (120) wherein R^4 is H, R^5 is F and R^6 is Cl.

Claim 28 (canceled)

24
29.

(currently amended) A compound of Formula (140) of claim 1:

(140)



Aut, 1080

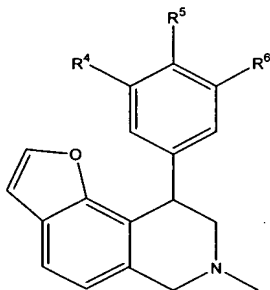
or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

a compound of Formula (140) wherein R^4 is H, R^5 is H and R^6 is H;
a compound of Formula (140) wherein R^4 is H, R^5 is F and R^6 is H;
a compound of Formula (140) wherein R^4 is H, R^5 is F and R^6 is Cl;
a compound of Formula (140) wherein R^4 is H, R^5 is Cl and R^6 is F;
a compound of Formula (140) wherein R^4 is H, R^5 is H and R^6 is Cl;
a compound of Formula (140) wherein R^4 is H, R^5 is OMe and R^6 is H; and
a compound of Formula (140) wherein R^4 is H, R^5 is F and R^6 is F.

25
30.

(currently amended) A compound of Formula (150) of claim 1:

(150)



T, 1090

or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

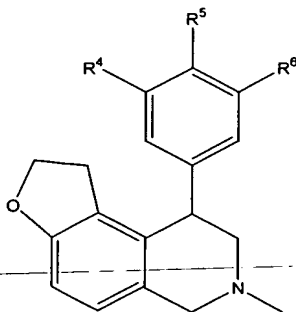
- a compound of Formula (150) wherein R⁴ is H, R⁵ is H and R⁶ is H;
- a compound of Formula (150) wherein R⁴ is H, R⁵ is F and R⁶ is H;
- a compound of Formula (150) wherein R⁴ is H, R⁵ is F and R⁶ is Cl;
- a compound of Formula (150) wherein R⁴ is H, R⁵ is Cl and R⁶ is F;
- a compound of Formula (150) wherein R⁴ is H, R⁵ is H and R⁶ is Cl;
- a compound of Formula (150) wherein R⁴ is H, R⁵ is OMe and R⁶ is H; and
- a compound of Formula (150) wherein R⁴ is H, R⁵ is F and R⁶ is F.

Claim 31 (canceled)

26
32.

(currently amended) A compound of Formula (170) of claim 1:

(170)



T, 1101

A

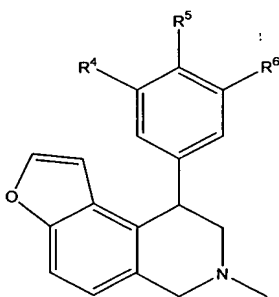
or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (170) wherein R^4 is H, R^5 is H and R^6 is H;
- a compound of Formula (170) wherein R^4 is H, R^5 is F and R^6 is H; and
- a compound of Formula (170) wherein R^4 is H, R^5 is F and R^6 is F.

27

33. (currently amended) A compound of Formula (180) of claim 1:

(180)



a, T, 1110

or a pharmaceutically acceptable salt form thereof selected from the group consisting essentially of:

- a compound of Formula (180) wherein R^4 is H, R^5 is H and R^6 is H;
- a compound of Formula (180) wherein R^4 is H, R^5 is F and R^6 is H; and
- a compound of Formula (180) wherein R^4 is H, R^5 is F and R^6 is F.

Claims 34-35 (canceled)

28

of:

36. (original) A compound of claim 1 selected from the group consisting

- (R)-2-methyl-4-phenyl-1,2,3,4,8,9-hexahydro-furo[2,3-*h*]isoquinoline;
- (S)-2-methyl-4-phenyl-1,2,3,4,8,9-hexahydro-furo[2,3-*h*]isoquinoline;
- (R)-7-methyl-5-phenyl-5,6,7,8-tetrahydro-furo[3,2-*g*]isoquinoline;
- (S)-7-methyl-5-phenyl-5,6,7,8-tetrahydro-furo[3,2-*g*]isoquinoline;
- (R)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
- (S)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(R)-4-(3,4-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(S)-4-(3,4-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo [2,3-*h*]isoquinoline;

(R)-2-methyl-4-phenyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(S)-2-methyl-4-phenyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(R)-4-(4-chloro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(S)-4-(4-chloro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(R)-8-methyl-6-phenyl-2,3,6,7,8,9-hexahydro-furo[3,2-*h*]isoquinoline;

(S)-8-methyl-6-phenyl-2,3,6,7,8,9-hexahydro-furo[3,2-*h*]isoquinoline;

(R)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(S)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(R)-4-(3,5-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-

a
h]isoquinoline;

(S)-4-(3,5-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(R)-2-methyl-4-phenyl-2,3,4,7-tetrahydro-1*H*-pyrrolo[2,3-*h*]isoquinoline; and

(S)-2-methyl-4-phenyl-2,3,4,7-tetrahydro-1*H*-pyrrolo[2,3-*h*]isoquinoline.

29
37. of:

(+)-2-methyl-4-phenyl-1,2,3,4,8,9-hexahydro-furo[2,3-*h*]isoquinoline;

(-)-2-methyl-4-phenyl-1,2,3,4,8,9-hexahydro-furo[2,3-*h*]isoquinoline;

(+)-7-methyl-5-phenyl-5,6,7,8-tetrahydro-furo[3,2-*g*]isoquinoline;

(-)-7-methyl-5-phenyl-5,6,7,8-tetrahydro-furo[3,2-*g*]isoquinoline;

(+)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(-)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(+)-4-(3,4-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-

h]isoquinoline;

(-)-4-(3,4-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(+)-2-methyl-4-phenyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(-)-2-methyl-4-phenyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;

(+)-4-(4-chloro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
(-)-4-(4-chloro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
(+)-8-methyl-6-phenyl-2,3,6,7,8,9-hexahydro-furo[3,2-*h*]isoquinoline;
(-)-8-methyl-6-phenyl-2,3,6,7,8,9-hexahydro-furo[3,2-*h*]isoquinoline;
(+)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
(-)-4-(4-fluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
(+)-4-(3,5-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
(-)-4-(3,5-difluoro-phenyl)-2-methyl-1,2,3,4-tetrahydro-furo[2,3-*h*]isoquinoline;
(+)-2-methyl-4-phenyl-2,3,4,7-tetrahydro-1*H*-pyrrolo[2,3-*h*]isoquinoline; and
(-)-2-methyl-4-phenyl-2,3,4,7-tetrahydro-1*H*-pyrrolo[2,3-*h*]isoquinoline.

30/38. (original) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of claim 1.

31/39. (original) A method of treating an animal afflicted with a neurological or psychological disorder selected from the group consisting of attention deficit-hyperactivity disorder, anxiety, depression, post-traumatic stress disorder, supranuclear palsy, feeding disorders, obsessive compulsive disorder, analgesia, smoking cessation, panic attacks, Parkinson's and phobia, said method comprising administering to the animal the pharmaceutical composition of claim 38.

32/40. (original) The method of claim 39 for treating attention deficit-hyperactivity disorder.